



HONOLULU AUTHORITY for RAPID TRANSPORTATION

Contaminated Soil in WOFH Highway Median Restoration Areas June 16, 2016

H O N O L U L U R A I L T R A N S I T P R O J E C T

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Summary

Bilateral contract change order in the amount of \$1,875,000 for payment on a **force account basis** for the disposal of contaminated material along the WOFH alignment.

Identified Contaminated Soil

Material samples were taken between Fort Weaver Rd and Waikele Stream to comply with Federal, State, and Local laws to characterize the material prior to disposal off site as no more fill areas are available along the alignment.



Portion of sample locations for
Decision Units



Test Results

HDOH has set the Environmental Action Level (EAL) limit for Total Petroleum Hydrocarbons-Residual Range Organics (TPH-RRO) at 500mg/kg. Test results from HART field samples far exceeded that threshold.

TPH-DRO AND RRO EPA 8015M

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	15-498-01					
Laboratory ID:	12-225-01					
Diesel Range Organics	ND	410	EPA 8015M	12-21-15	12-21-15	U1,X1
Residual Range Organics	4200	270	EPA 8015M	12-21-15	12-21-15	X1
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	86	50-150				
Client ID:	15-498-02					
Laboratory ID:	12-225-02					
Diesel Range Organics	ND	140	EPA 8015M	12-21-15	12-21-15	X1
Residual Range Organics	3400	270	EPA 8015M	12-21-15	12-21-15	X1
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	106	50-150				

This material is above the EAL limit and is considered “regulated” as solid waste but not “hazardous” as defined by EPA and DOT.

Options For Contaminated Soil:

OPTION 1 – Re-use soil within HART work area excluding HDOT R.O.W. since they will only accept soil that is deemed non-detect (i.e. clean):

- HART does not have any current locations that require fill material, therefore this option is unavailable.

OPTION 2 – Re-use Soil off-site:

- Results from testing exceeded the Tier 1 EAL for “unrestricted use” and Commercial Industrial (C/I) use (C/I level is 1,000 mg/kg) thereby requiring the material to be disposed as indicated in Option 3

OPTION 3 – Dispose of soil at disposal facility:

- The concentration of TPH-RROs in the soil limit HARTs ability to dispose of the soil off site and require the use of an approved disposal facility (PVT).

Contractual Position:

Contract Addendum No. 20 stated that payment for removal of contaminated material would be through a change order, if required. Accordingly, this Contract Change Order (CCO) establishes a Provisional Sum to pay for additional hauling/trucking costs and landfill disposal fees in accordance with the requirements of GCDB Section 6.10 “**Force Account**”.

The actual volume of material is an estimate only, and due to the inability to quantify the exact volume of soil to be disposed, paying for the work on a Force Account basis would ensure HART is paying a fair and equitable price while expediting the work and preserving schedule.

ADDED WORK SCOPE AND ESTIMATED PRICE:

WOFH RFCC-00152 Contaminated Material at Median Restoration Areas

Quantity of Contaminated Soil Material	15,000	CY
Capacity per Truck Load	15	CY
Required Truck Loads to PVT Landfill	1,500	Load
Base Scope - Hauling/Trucking costs to fill site (Kapolei)	\$75 / load	
Added Scope - Hauling/Trucking costs to PVT Landfill	\$196 / load	
NET Hauling/Trucking cost =	\$121	Load
SUBTOTAL Hauling/Trucking Costs	\$181,500	
Mark-up (Bond, GET, Overhead & Profit)	\$20,800	
TOTAL Trucking Costs =	\$202,300	

Disposal Fee at PVT Landfill	\$48	Ton
Material Quantity per Truck Load	18	Ton
Required Truck Loads to PVT Landfill	1,500	Load
SUBTOTAL Disposal Fees at PVT Landfill	\$1,296,000	
Mark-up (Bond, GET, Overhead & Profit)	\$344,700	
TOTAL Disposal Fees =	\$1,640,700	

HART is requesting \$1.875 Million for Provisional Sum

Mahalo!

